

ABSTRACT OF THE DISCLOSURE

A system and method of recognizing speech comprises an audio receiving element and a computer server. The audio receiving element and the computer server perform the process steps of the method. The method involves training a stored set of phonemes by converting them into n-dimensional space, where n is a relatively large number. Once the stored phonemes are converted, they are transformed using single value decomposition to conform the data generally into a hypersphere. The received phonemes from the audio-receiving element are also converted into n-dimensional space and transformed using single value decomposition to conform the data into a hypersphere. The method compares the transformed received phoneme to each transformed stored phoneme by comparing a first distance from a center of the hypersphere to a point associated with the transformed received phoneme and a second distance from the center of the hypersphere to a point associated with the respective transformed stored phoneme.